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and biologists, no less than eugenists, are alive to the requirements and potentialities of the future. It is interesting in this connection to note the words of Professor J. B. S. Haldane :

"I would urge the extraordinary importance of a scientific study of the effects of racial crossing for the future of the British Commonwealth. Until such a study has been accomplished, and it is a study which will take generations to complete, we are not, I think, justified in any dogmatism as to the effects of racial crossing. It may not be desirable to forbid it, but there can be little reason, I think, to encourage it as between the widely different races of mankind."

At the present time this country and the British Commonwealth are engaged in a bitter and costly struggle. Nevertheless, it is recognized that planning and construction must go on. New cities will have to be built over the ashes of the present ones to house the populations of the future. Is it not true, also, that the foundations upon which the human and racial relationships of those populations will rest are in no less urgent need of examination and reconstruction? These are grave days for science and scientific workers. Yet the hour at present is no graver than it was for the scientists of Barcelona, who, conscious even that their work might be

lost, went calmly on amidst the chaos of the siege to amass much-needed serological material out of the very shambles.

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no reference is made to eugenics. It should be read and pondered over by all eugenists who are in the habit of attempting to strengthen their case for a population policy by the use of non-eugenic arguments about the effects of population trends in the future.

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Edited by W. C. ALLEE, Professor of Zoölogy, The University of Chicago. Published Quarterly by the University of Chicago Press. Subscription : 35s. 2d. per year.

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## OTHER NOTICES

**White, E. M.** *Woman and Civilization*. London, 1940. John Bale & Staples. Pp. 62. Price 2s. 6d.

"WOMAN has not yet proved her full worth to civilization," says the author. This is indeed a comforting thought, for it seems to prove that we need not despair—even now! But Miss White's little book is a marvel of wishful thinking. It bristles with such statements as: "Physical strength has achieved its purpose in the world . . . but now force is giving way to mind and character as better ideals." There might be no world struggle taking place at all—the only allusion to it being that: "When we can detach ourselves from the present turmoils and can view woman, life, and evolution sub specie æternitatis, we can discern a great movement of slow advance all through." She deprecates "recriminations of other countries," which certainly indicates a detachment equal to that of the ostrich. Her ideals are admirable—if

only she would adopt a more realistic approach to their fulfilment.

In other words, Miss White tells us what should be and assumes that therefore it will be. Thus: "Civilization is the conquest of egoism by altruism, and the whole evolution is a witness to the rising power of human sympathy." Again: "It knows now that its fate lies in its own hands; it can make of itself what it will." But, does it know?, and even if it knows, how does it propose to "make of itself what it will"?

Eugenics is mentioned as one of the topics on which women need no longer fear to speak. "An adequate universal education could change the world in two generations." How true!, but who is going to formulate and direct this adequate universal education? If Miss White will answer some of the questions which her theme raises up, she will indeed make a valuable contribution to the cause of woman and civilization.

U. G. D.

## HEREDITY AND SOCIAL PROBLEMS

By **L. L. BURLINGAME**, *Professor of Biology, Stanford University*  
369 pages, 9×6, illustrated, 24/6 net

A BRIEF and general introduction to the biology of reproduction and its consequence, heredity. It shows how and when this knowledge can or cannot be applied to social problems in the broader sense, and acquaints the student with the possible applications of biology to human affairs. It presents those elementary principles which are necessary to an understanding of the origin of certain social, educational, and political problems, and then deals with the application of these principles to the heredity of physical and mental traits of man. This section includes a brief chapter showing that both normal and abnormal traits of man are inherited in the same ways as are those of other animals and plants and that all the main types of heredity known in the latter are also known in man. From this the book proceeds to show that mental traits have the same sort of biological basis as any other functional traits and that they are similarly inherited.

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of age. The voting majority will thus be elderly people or those approaching old age, to the great advantage of legislation in favour of pensions. Obviously, then, the pension movements of to-day are insignificant in comparison with their future power and influence in presidential elections, and the economic system of the country could easily be wrecked by their demands. Apart from those who are able to build up an economic independence for their old age, there are three methods of dealing with this problem by community action: (1) Public assistance on the basis of need; this will always remain a cautious and conservative programme dealing only with a minority of old persons. (2) The free pension method, comprising uniform pensions without a means test. Though attractive to many, this would be a considerable drain on the finances of the State—the author gives figures estimating a five-fold increase in taxation immediately. And (3) contributory old-age insurance, which has the great advantage of linking beneficiary and taxpayer and making each voter a person who thinks of costs and benefits.

The difficulties of this problem are aggravated by the present industrial system, in which rapid changes in industrial methods lead to workers in their forties facing the alternatives of unemployment or the necessity of retraining themselves to meet new conditions. Only by keeping the retirement age to 65, retraining middle-aged workers, helping them to make the necessary mental adjustments and devising some means by which they can be re-absorbed into industry, can the community avoid a financial burden which may well ruin the economic system of the country.

Under the title *Population Trends and Problems of Public Health* G. St. J. Perrot and Dorothy F. Holland discuss fully, with the aid of numerous charts and tables, the death rates from various causes, and the increasing number of disabling illnesses and days of disability in an ageing population. Up to the present the public health services have been mainly concerned with the control of preventable disease; in the future they will be

devoted increasingly to the health supervision of persons of middle and old age, entailing an extension of research into the cause and control of chronic diseases characteristic of advanced life.

In a paper on *Adapting Programmes of Social Welfare to a Changing Population*, Philip Klein deals with the economic background of sociology and the socio-economic problems resulting from the changes in the age distribution of the population of 1930 as compared with that of 1870. The proportion of producers to consumers has risen from 55.7 to 63.4 per cent, while at the same time unit productivity has increased both in industry and agriculture. A number of proposals are put forward, aiming at the restoration of a favourable producer-consumer ratio: concentration of producers in the 20-55 age-group, and, by means of apprenticeship and old-age insurance, the placing of the rest of the community in the consumer class; completion of a system of old-age, unemployment and sickness insurance; reduction of hours and increase of wages; shifting poorly-paid, blind-alley occupations to the 50-65 age group. Under these conditions welfare services would be essential for ensuring a decent standard of living for the low-wage earner. While being a means of absorbing suitable personnel, these services would "constitute a stabilizing influence on the financial structure by the consumption of products through public expenditures, which are less subject to violent fluctuations than is competitive business. . . . Their purchase, through tax payment, would draw upon the capital-labour economy as a sort of fixed charge. But these services seem to be also a way out of the impasse created by the ever-widening ratio between producing power and consuming power of other economic commodities."

There is an article on *Vitamins and their Occurrence in Foods* by Hazel E. Munsell, and Eleanor P. Hunt and Carroll E. Palmer write on the *Measurement of Visual Dark Adaption with the Adaptometer*; this is the second paper in a survey being conducted in New York City on the *Medical Evaluation of Nutritional Status*. K. H.

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